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THE PROGNOSIS OF CATARACT, AND THE RULES BY WHICH IT IS FORMED, BEING AN EXTRACT FROM A LECTURE DELIVERED AT THE MEDICAL COLLEGE, MARCH 22.

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ONE of the hardest questions to answer a patient is the one invariably put in a case of commencing or progressive cataract, viz., how long it will take to fully ripen. There is every shade of difference in this respect. The age and health of the patient are doubtless influential factors. Sometimes a cataract comes on almost "overnight," to use the popular phrase, and sometimes slowly progresses through a series of years. Senile cataracts are apt to advance with extreme slowness, and it is impossible to predict with any confidence their probable course. Very curious, indeed, it is to note the sudden jumps or strides the disease may take, when least expected. In one case, which has, I think, never been made public, it seems to have been the result of exhausting sexual intercourse. An elderly man married a second wife, considerably younger than himself. The next morning at breakfast he complained of great failure of sight. The eyes were examined, and double cataract found, which very rapidly advanced, and was successfully operated on. Another case of very rapidly progressing cataract occurred in my own practice. A gentleman, 65 years of age, consulted me in November, 1865. For several years he had observed that one of his eyes was somewhat inferior to the other, and he now came to ascertain the reason. I found that with this eye he saw only half as well as with the other, and on dilating the pupil discovered the lens to be opaque in several places, a state of things that had probably long existed. The centre of the lens was clear. In the posterior cortical substance were several faint opacities. At the lower

and inner edge of the anterior cortical were two clear cut opacities, and numerous fine spiculæ shot out all along the periphery of the lens. Still it was in the main so transparent that the optic nerve entrance, and all the details of the fundus, could be plainly seen through it.

I told my patient the cataract might be years in forming, and any prediction as to when it would be ready for operation would be mere guess work.

He was a man of much intelligence, and, from that time forward, minutely studied every phase of its development. A year later, he again made his appearance, and told me a sudden change had occurred three months after my examination, and that this whole change had taken place within forty-eight hours. I found a well-marked, fully opaque cataract, and subsequently removed it.

As a rule, cataracts beginning in the posterior part of the lens go on very slowly. When the streaks of commencing opacity in the front of the lens are very fine, the cataract progresses less rapidly than when they are broad and opalescent. In young people, soft cataracts advance fast, and so may traumatic cataracts at any age. A safe general rule for any form of cataract, is that the older the patient is, the longer it takes to form.

We now come to the question of *treatment*. It has been justly observed that the natural repugnance of all patients to a surgical operation, and the persistency with which they have, in all ages, urged their medical attendants to attempt their cure by constitutional treatment, or local applications, have resulted in a vast number of experiments as to the possibility of thus "dissolving" cataract. The discovery of a reliable agent for producing this effect would be an achievement to rank with the bringing to light the philosopher's stone, or the secret of perpetual motion. Charlatanism, consequently, has nowhere in medicine found a more fertile field. Century after century the remedies vaunted as capable of accomplishing this end have been innumerable. Even men of science, misled by the

disappearance of opacities of the epithelial intracapsular layer, consequent on iridochoroiditis, and by the gradual clearing up of the loss of transparency which follows slight wounds of the capsule, as well as by the spontaneous dislocation or rupture of an opaque lens, have made the mistake of attributing such results to the remedies used by them, and have drawn deceptive conclusions therefrom. Thus certain preparations of iodine and of mercury, the subcutaneous injection of ammoniac, and the use of phosphuretted oil, have attained a temporary, but always fleeting, notoriety.

At the great Ophthalmological Congress, held in Brussels in 1857, one of the questions proposed for discussion was the following: "Has experience established that certain forms of cataract can be cured without operation?" And with hardly a dissenting voice it was agreed that the annals of science do not show a single authentic instance of a cataract ever having retrograded, or of its progress ever having been arrested through any medical treatment whatever.

More recently, Prof. Sperino, of Turin, has proposed repeated punctures of the cornea and evacuations of the aqueous humor, as a means of curing cataract and restoring the transparency of the lens; and presents a startling array of cases thus treated, in confirmation of his views. It is certain, however, that, in other hands, the method has failed entirely. And it is strongly objected to it that it is, at the best, but slightly efficacious; that it is very slow in its action, and that its practice is after all the performance of a surgical operation, and, from its frequent repetition, most unpleasant to patients. It has consequently failed to be extensively followed.

You will not, therefore, attempt to make a patient believe that you can cure him without an operation. But the uneasiness "unless something is being done" so inherent in human nature, and from which the majority of your callers will not be exempt, is an ample justification for the exhibition of some harmless placebo, such as a salve of iodide of potash to be rubbed on the forehead, or the internal administration of small doses of the same remedy. And if the patient sees better when his pupil is enlarged, you will render him a positive service by ordering him a solution of atropine to use daily. But if the opacity is beginning at the periphery of the lens, and a widely-open pupil interferes with the exercise of sight, you may give a solution of

calabar bean and, by contracting the pupil, cut off the excess of light.

A good operator must not only be possessed of the mechanical skill necessary for the proper performance of the operation, but must be able to tell in advance whether a case is likely to do well or not, and, from certain appearances and tests, to estimate the chances of success. In other words, it is necessary, in the outset, to ascertain whether the case be a simple one of lenticular opacity, or whether other and serious disease is lurking behind the cataract in the posterior part of the eye. There are four golden rules on the observance of which your prognosis must be based, four distinct facts to be ascertained before proceeding to an operation. He who disregards them will surely, once-in a while, come to grief.

The first is, *note the size of the patient's cornea*. The cornea is spoken of as measuring so many lines in diameter. And the average diameter of the cornea, in a healthy and well-developed adult, is five lines. The actual measurement may conveniently be made by holding before the eye to be measured the little instrument used for estimating the amount of strabismus present, and reading off the number of lines from its graduated face.

The cornea, while ordinarily measuring five lines, may measure four and a half, and even four. And it is precisely these cases of small cornea where we must be guarded in our prognosis. It is not a reason for the non-performance of the operation; but such eyes are not as apt to heal and are more liable to take on inflammation than those of more liberal dimensions.

Second rule, *note whether the movements of the iris are free and independent, also whether the effect of atropine is active and ample*. Covering the other eye thoroughly, so as to exclude all chance of sympathetic action, we are to see whether the pupil dilates readily when light is intercepted, and contracts on its admission. A drop of the solution of atropine, referred to in the last lecture, should also be applied. If now, at the end of half an hour, the pupil is but slightly dilated, if ciliary redness and pain, either or both, follow the use of the drop, and if, in response to the previous test, the pupil works sluggishly when exposed to light and darkness, our prospects of success are materially impaired. It is well, moreover, in examining the iris, to note whether it seems at all tremulous when the eye is moved rapidly, because such tremulousness betokens the presence either of a partial

dislocation of the lens, or of an unnaturally fluid condition of the vitreous humor.

Third rule, *test the perception of light*. The sound eye being carefully covered, and that, too, not in the slovenly way we so often see employed, but with a handkerchief or towel, rolled into a ball and pressed firmly against it; the eye affected with cataract is to be examined with regard to the position and number of windows in a room, or, still better, the patient is to be taken into a dark room, and tried with the flame of a lamp or candle. In general terms it may be stated that, in spite of the cataract, the eye ought to see the flame of the lamp ten feet off, and that, if it has to be brought much nearer, there is some disease of the percipient apparatus, a fact that would materially modify the prognosis.

Graefe was in the habit of employing, for this examination, a lamp, the flame of which was behind a movable screen, in which were pierced holes varying in size. He could thus graduate exactly the amount of light employed, and test the acuteness of its perception, expressing it even on paper, by giving the distance and the number of the diaphragm. But, for ordinary purposes, a common hand lamp, the flame of which can be hidden by the hand, and the wick raised or lowered, answers well enough.

Fourth and last rule, *examine the state of the field of vision*. In buying a mirror for a dressing-table, it is not sufficient to observe that the part which will ordinarily reflect the person, be well silvered and of good glass; but the more remote portions and periphery receive their share of attention, and a serious flaw in them would cause the rejection of the article. This comparison holds exactly with regard to the eye. The lateral portions of the retina merit examination, as well as the region of what is known as the yellow spot, the point of central fixation. A candle is held first directly before the patient, in the usual distance. He is then directed to look straight ahead, and the candle is moved successively up, down, and to either side. If in one direction the candle becomes invisible, there is sure to be some complication. We ought to particularly note the activity in perception of the upper part of the field, as it is at the lower part of the retina that separations are most likely to occur.

To illustrate the importance of this last method of examination, I would say that I, not many years ago, operated for cataract on a lady who had always been quite near-sighted, but whose eyes had been supposed

to be otherwise in excellent condition. Being somewhat pressed for time, when I made my examination, I noted the activity of the pupil and the general perception of light, but did not test the different portions of the field, as I have just insisted on your doing. No accident occurred at the time of operation, the cataract came out whole, no opaque capsule remained behind, the wound healed perfectly, and I encouraged the family to suppose that very useful vision would be the result. But when I came to the selection of glasses, I found that with no combination could the patient either read or write, and that her vision was restricted to the perception of large objects about the room. The reason of this became apparent as soon as the interior of the eye was examined with the ophthalmoscope. The lateral portions of the retina and chorioid were normal. Adjoining the optic nerve, and continuous with it, was a white patch, resulting from atrophy of the chorioid, and such as is no infrequent accompaniment of considerable near-sight. This, of itself, would not have interfered with the power of reading or writing. But in the centre of the retina, directly overlying the macula lutea, the seat of most acute vision, was another isolated white patch, of the same atrophy, rendering accurate vision as impossible as a piece broken out of the centre of a mirror would have a correct reflection from its surface. Had I made a thorough examination to begin with, holding the candle up, down, to either side, and, finally, directly before the eye, I should have found that perception was diminished in the last position, and hence have inferred a disorganization in the region of the macula lutea. Knowing this in advance, I should not have advised an operation on this eye.

This completes the subject of the nature, diagnosis and prognosis of cataract, and it is now time to explain the theory and demonstrate the method of the principal operations for its removal, particularly of that one which, within five years, has risen to such preëminence as to nearly if not quite supersede all others. Previous to this, however, let me teach you how to answer one or two questions which are very frequently put, and which, if not prepared for, you may find it a little awkward to encounter.

Should one eye be operated on when the other is entirely normal? Popular prejudice says, unhesitatingly, No. "Wait till the other eye begins to go," is the cry of all the old women and half the sympathizing friends. And, at first sight, they would

seem to be right. By depriving an eye of its crystalline lens, you not only entirely rob it of its accommodation, but materially alter its refraction; hence the natural feeling that it must not only seriously interfere with its fellow, but give rise to all the annoying consequences of double vision. It is precisely, however, this that does not happen, it is on this very point that the whole thing turns. Recent investigations show that a certain degree of binocular vision is enjoyed; that the operated eye helps its fellow; that, though it has a wholly different refraction, and hence forms an entirely different image, its possession does yet enlarge the patient's field of vision, aids his estimate of distance and his appreciation of solidity, and enables him, in short, to get along and about much better than without it. Operate, therefore, always on one eye, even if the other is wholly sound, unless your patient is an aged man, unused to sickness or confinement, and liable to have his general health injuriously affected by confinement to his room for ten days or a fortnight, and the consequent breaking in upon his usual habits and change in his customary diet.

A question that naturally allies itself to the foregoing is, *does it do any harm to postpone the operation?* None whatever, provided the patient is content to suffer the disadvantage of seeing with one eye. When an eye squints, that is turns out or in, and a mental effort is necessary to exclude the image furnished by it, in order to avoid double vision, its powers become rapidly impaired. But when an opaque screen, like a cataract, is set up between the incident rays and the retina, and the effort of exclusion becomes unnecessary, the acuteness of vision may remain unimpaired through a long series of years. These remarks are, however, applicable only to an eye that has already attained its development. If the case be one of congenital cataract, or cataract occurring in a child, the most disastrous consequences might result from continued exclusion from the light, and the operation is on no account to be deferred. With infants and children all delays are dangerous.

Ought we in all cases to wait till a cataract is entirely ripe, before proceeding to operate? It has been justly observed that many cases of senile cataract advance so slowly that, if absolute maturity be waited for, no operation will ever really be done. Many an aged patient has died without regaining his sight, through a well-meaning, but really unne-

cessary, delay. Thanks to the present methods of extraction, particularly to the one to which your attention will specially be called, senile cataracts, though not entirely perfect, may now be removed with a degree of safety previously unknown. It is, of course, theoretically, more desirable to wait for absolute ripeness; still, if a person has cataract on each eye, complete in neither, and sufficiently advanced to interfere with his reading, writing, and getting around, the operation on the one most developed ought no longer to be deferred.

The last question is a particularly practical one. *"If we have both eyes affected with cataract, and both cataracts ripe, ought both eyes to be operated on at the same time?"* We answer, confidently, No. And this for two reasons. If one eye only be operated on, the symptoms which follow, and the way and manner in which the eye rallies from, or, in exceptional cases, sinks under the violence inflicted on it, guide us materially in what we are to do for the other eye, and teach us to adopt such preparations or to so modify our method as to give the patient a better chance of sight, and to save him from the dangers to which our ignorance of his idiosyncrasies exposed him the first time. Again, a patient or his attendants, being little used to such delicate operations, may be imprudent, transgress our positive directions, and consequently lose the eye. Conceive the melancholy future of such a person, provided both his eyes had been operated on. If, however, one only has been touched, he will learn wisdom by experience, and ensure success by being more careful the second time.

A simultaneous operation on both eyes is therefore to be regarded as absolutely unjustifiable, save in the most exceptional cases.

AN ATTACK UPON ETHER.—A late homœopathic writer, after describing a case of death from chloroform, urges that very great harm has been done by ether also. He thinks that no account has been taken of the lasting injury done to the mind and to the nervous system by the latter agent. This is entirely in accord with a popular prejudice; but, if there were any foundation for it, it could not have escaped notice, considering the vast experience of the profession in the use of this anæsthetic during the last twenty-three years.—*Philadelphia Med. Times.*

PROFESSOR HEBRA ON DISEASES OF THE SKIN.*

By JAMES C. WHITE, M.D., Boston.

UNEXPECTEDLY, and after an interval of several years, another *Lieferung*, the first part of the second volume of Prof. Hebra's great work, has appeared. Translations of the first and second parts of the first volume were published, it will be remembered, by the Sydenham Society in 1866 and 1868, and in these the affections comprised under the first five classes of the author's system were considered. The present part treats of his sixth and seventh classes, *Hypertrophie cutaneæ* and *Atrophie cutaneæ*. Eagerly as its publication has been looked forward to, however, a glance at its table of contents cannot fail to convey disappointment, for of its 145 pages but 45 only, comprising the first two subdivisions of the hypertrophies, are the author's own work or words. Of the first volume, to be sure, certain chapters were contributed by other observers, but these were the smallest and least important portions. In the present part Prof. Hebra contributes only that portion which treats of increase of pigment, corns, warts, and ichthyosis; such important and obscure diseases as scleroderma, elephantiasis arabum, and the affections of the hair, which have so long been awaiting such illumination as his accurate observation and judgment have thrown upon all the subjects he has written of, have been left to be worked up by another person. If such a substitution is inevitable in the continuation of the work, then no doubt we have the best possible proxy in this case, for Dr. Moriz Kohn, the author of the larger part of the book, is not only Prof. Hebra's assistant in his skin clinic, but is also his son-in-law, so that we have without doubt really the views of the instructor and chief throughout, although presented by the younger observer. Indeed, it is not likely that Prof. Hebra would permit a work, which represents the labors of a life-time and upon which the continuance of his pre-eminent fame as a dermatologist must rest after his active career of teacher is over, to express views not in harmony with the doctrines he has so long taught. We must regard the volume, then, as one which goes out into the world with his approval and which represents his own opinions.

The subjects discussed under the sixth of

his classes are hypertrophies of the pigment of the skin and of the epidermis; of the hair and nails; and of the fibrous structure of the skin, scleroderma or sclerema, elephantiasis arabum, and frambœsia. Under the seventh class we find atrophy of the pigment of the skin and hair, atrophy of the hair itself and of the nails, and atrophy of the various tissues of the skin. What I may have to say with regard to any of these may, for the present purpose perhaps, be best said in connection with the special parts affected, and without close regard to this pathological division.

Anomalies of Pigmentation.—The so-called affections of the pigmentary matter of the skin are, in fact, mostly variations in its amount and distribution over its surface. They may be divided into three well-marked classes:—

1st. An excess of pigment, general or local.

2d. A deficiency of pigment, partial or general.

3d. The presence of pigment of an abnormal or extraneous character.

It seems necessary, therefore, to establish a standard of normality, by reference to which we may decide whether an individual case deviates so far to either side as to constitute disease. This is, however, impossible, so far as the general coloring of the body is concerned, for even among the Latin races whole nations inhabiting subtropical latitudes approach the blacks in depth of color, and the palest Saxon stock furnishes a large percentage of dark-skinned families. It is evident, then, that each individual must find in the general color of his skin his own standard, and that variations from this, either at different periods of life or on distinct portions of his body at any one time, constitute the affections we are considering. Changes of color in certain localities do take place, however, which are not regarded as abnormal, but as occurring in some persons and at certain times in the course of nature. Such are the darkening of the genitals, especially those of the male sex, with maturity and excessive use, amounting at times to the deepest shades of brown and black; the darkening of the skin about the anus and axillæ in adult life; and the deposition of pigment about the nipples and along the linea alba during pregnancy, and about the eyelids during the monthly period in the female. These changes, although considered natural processes, differ in no way anatomically from similar conditions we call disease.

* Hautkrankheiten. Von Prof. Hebra. Virchow's Handbuch der speciellen Pathologie und Therapie. III. Band. II. Theil. 1. Lieferung.

Diseases of the Skin. By Prof. Hebra. In Virchow's Handbook of Special Pathology and Therapy.

A glance at the chapters on affections of the pigment in some works on dermatology, would give the impression that they are perhaps the most serious and complicated, the most numerous and difficult group of skin diseases, by the number and length of the titles employed. The longest of Greek works have been invented to represent every tint which the skin is capable of assuming, and, once invented, are supposed to signify individual diseases. The number of terms required to designate the distinct affections are very few, and it is pleasing to see that Prof. Hebra has, instead of introducing new, given up some of the old titles in connection with these affections.

1st Class. Hypertrophies.—The simplest deviation in this direction from the normal condition of the pigment is its development in excess upon such parts of the skin of many persons as are exposed to the weather, which we call tan. It is not exclusively the direct rays of the sun that is the exciting agent in this change, for a few hours' exposure to sea-air and fog, even when the sun is obscured, will produce a marked alteration of color upon some, and there seems to be a difference of tint in the faces of the sailor and of the out-door laborer on shore. It is astonishing how rapidly and to how great an extent the pigment is developed in some skins under exposure, as witnessed on the necks and arms of the fairest oarsmen and ball-players at the end of the season; a few months only being sufficient to develop a hue as swarthy as that of the darkest Latin nations, and suggesting what cycles of a tropical sun and accumulative transmissibility might do, and may have done, in painting the various races of mankind. Tan and sunburn are two distinct processes, though produced by the same cause; the latter being a temporary congestion or erythema of the skin, and in no way necessarily connected with changes in the pigmentary system. They may occur simultaneously, but often the skin which tans easily does not burn readily. Frequent burning, however, like all congestions, is apt to develop the deposition of coloring matter in the parts so over-supplied with blood, according to a well-known law. Ordinary tan generally disappears spontaneously in our latitude of strong extremes, where the cold overrules the heat, and where all warmth of color, both in animal and plant, fades out with departing summer. In our Southern States, peopled by the same original Anglo-Saxon stock as ourselves, the hue of the skin is several shades darker than our own, and the short-

er winters exert but a mild bleaching influence upon it. There, too, miscegenation has given us ample opportunity of studying the effect of dilution upon the intense blackness of the negro race, and although a single cross is found sufficient to diminish this to a great extent, it requires many successive intermixtures to deprive the cells of the rete mucosum of all their native pigment.

Now Prof. Hebra makes but two simple divisions of all the affections marked by increase of pigment, viz., *Lentigines* and *Chloasmata*. Under the former he places those in which the coloring matter appears in the form of spots not exceeding a pea in size, upon whatever part of the body they may occur, whether permanent or temporary. *Chloasmata*, on the other hand, are, according to his definition, yellow or yellowish-brown patches, in size varying from the palm of the hand to a plate or larger, of manifold shape, situated on various parts of the body, and more or less circumscribed and sharply defined. This term *chloasma* has been used with the widest latitude of meaning. Compare, for instance, the different names applied to that variety which so frequently affects the forehead of women. *Bärensprung* calls it *melasma*, *Klein* *hans melasma*, *Hardy* both *chloasma* and *epheles*, *Bazin* *melasma*, *Neligan* *epheles hepatica*, *Hillier* *epheles lentigo*, and *Wilson* both *melasma figuratum* and *chloasma*, though by the latter he means *pityriasis versicolor*, an entirely distinct and parasitic affection. Prof. Hebra recognizes an idiopathic and a symptomatic *chloasma*; of the former three sub-varieties, viz., *traumaticum*, *toxicum*, and *caloricum*—and of the latter two, viz., *uterinum* and *cachecticum*. These terms, of course, imply rather variety in causation than in appearances. Under *melasma* he alludes very briefly to darkening of the skin more or less universal in extent, such as accompanies several obscure forms of disease, as *pellagra*, *scleroderma*, *morbus Addisoni*, &c.

With regard to the treatment of these pigment stains, even of those of limited extent and tending to spontaneous variation, like moth upon the face, one gains but little additional confidence in his power over them after the perusal of Hebra's section upon the subject. As the pigment cells are the youngest and deepest of the Malpighian layer, it is evident that their removal by local means involves the removal also of everything above them. In the selection of remedies possessing this property of destroying the epidermis he calls our attention to the

fact, that the action of some of these is followed by the production of an epidermis which contains more pigment than before, while after the action of others the newly formed cells contain less than previously. Among the former are croton oil, mustard and cantharides; among the latter acetic acid, borax, the caustic alkalies and corrosive sublimate. It need scarcely be said, then, that our choice will be made from the latter, and experience has demonstrated that the last named of them is the most reliable, whether we use it as a rapid vesicant or accomplish the same object more gradually by dilute solutions and imperceptible desquamation. In either case the result is too often but a temporary success, but the latter method may be used continuously and without detriment.

Atrophy of Pigment.—The second division of these affections, characterized by a deficiency or absence of the coloring matter of the skin, is called leucopathia. Two forms are recognized by the author, one congenital, which is either partial or universal, and is called albinismus; the other acquired, and occurring either consecutive to or as an accompaniment of other pathological changes in the skin, or idiopathic, and then called vitiligo. This latter disease, which presents by far the greatest clinical interest, is thus defined:—A peculiar affection marked by the appearance upon the skin of round or oval, sharply defined, white, and smooth spots, which constantly increase, their edges being surrounded by abnormally dark pigment, as if the coloring matter had been washed from the centre to the periphery. The hairs growing from such spots may or may not also be deprived of their pigment. Otherwise there is no change in the normal anatomy of the skin and its functions, in resistance, thickness, temperature, or sensation, even when large portions of the general surface become thus gradually affected. There are no accompanying subjective symptoms either in the course of the affection. These are negative conditions of great importance in point of diagnosis, inasmuch as this simple and harmless affection is often confounded with the early manifestations of other and grave diseases, in which the pigmentary as well as the other tissues of the skin are alike affected. In leprosy, elephantiasis græcorum, for instance, loss of pigment in patches, with increase of the same in others, is the first symptom of one of its varieties; but with this change is more or less thickening or anæsthesia of the parts. In another form the spots are bet-

ter defined, but the skin is atrophied and often surrounded by an elevated border of a variety of colors. In this variety the atrophy does not stop with the cutaneous tissues, but extends to everything below—to muscle, bone, &c. This latter form Kohn considers to be the same as that affection so prominently described of late by English dermatologists as morphea. In the treatment of leucoderma in all its forms we are helpless. The newly formed cells of the rete mucosum do not receive from the blood-vessels of the papillæ their normal coloring matter. This is the state of things; why it is we do not know, nor can we change it.

With the third of our divisions above given, extraneous and artificial pigmentation, the volume has at present of course nothing to do.

The Hair.—The term hypertrophy is applicable to this appendage of the skin in two ways, either in respect to the unnatural development of single hairs, or to the growth of normal hairs in abnormal quantity or position. The chapter on hypertrichosis or hirsuties contains little that is new or interesting, or which may not be found in other works; but the subject of Plica polonica (Weichelpopf) is treated of at length for the purpose of demonstrating that no such disease exists, but that the appearances thus called are produced solely by mechanical felting of the hairs through neglect of the comb and other means of cleanliness, which seem incomprehensible to those who have never seen the extent of filthiness in which some races live. Strange to say, the necessity of such argument, even among dermatologists, exists.

Atrophy.—Under this head Kohn treats both of the loss of the pigment of the hair, and of the hair itself.

With regard to the much vexed question, "How does the hair become gray?" Hebra and Kohn agree in their conclusions that this never takes place from any change in the tissues of the hair when once formed, but that it is always caused by a cessation in the development of the pigment in the papillæ; that this arrest of development is generally at first an interrupted process, so that alternations of activity and cessation occur, and only gradually does the individual hair become throughout, and from below upwards, entirely gray or colorless; that hairs which appear quite gray to the eye will be seen by the microscope to contain still more or less pigment in the medullary substance; and that this temporary arrest and activity of pigment development explain the ringed hairs often observed,

and the changes of color which occur after certain diseases. They do not hesitate also to refuse all credence to theories or observations which go to support the possibility of a sudden blanching of the hair. There is no doubt that this belief has, until within a short time, rested on quite unreliable evidence, but it seems to me that the one or two positive observations which have been made, like that of the well-known case of Landois,* are not to be set aside in this light way, and that we must admit the possibility of changes within the substance of the hair of sudden occurrence, which may cause an opacity simulating loss of color, even if it do seem well-nigh impossible to explain how all the hairs of a man's head could become filled with air-bubbles in a single night. Hebra is loth to believe anything he has not had opportunity of observing himself, but he must show us that Landois is an unreliable observer, or the fact of such possibility must stand. There can be no doubt, however, of the correctness of his views concerning the ordinary process of graying of the hair.

Atrophy applied to the hair implies either alteration in nutrition or structure. For the former affections one common name is used by the author, alopecia, whatever the cause. They are divided into congenital and acquired alopecia. The latter is subdivided into senile and premature, and the last named again into idiopathic and symptomatic. It is these latter affections which, from their frequent occurrence, chiefly claim our attention. The only representative of the idiopathic class, according to Kohn, is that mysterious affection variously called, *area celsi*, alopecia *circumscripta*, *porrigo decalvans*, and by him alopecia *areata*.

This is characterized, as is well known, by the occurrence of *bald spots*, more or less circular in shape, which have generally attained some considerable size before they are discovered. The skin of such portions of the scalp looks rather paler than normal, shows no trace of former growth of hair, is smooth, and perhaps either slightly elevated and elastic, or else depressed and firmer than the surrounding parts. It may, however, with the exception of this loss of hair, and consequent retrocession of the hair follicles, appear natural. It affects, too, as is known, the beard and eyebrows, and may extend to the other hairy portions of the body. There has for a long time been a dispute as to whether this affection is of parasitic origin or not, many recent derma-

tologists maintaining that it is not, because they fail to find the fungus in the cases examined, and of this latter opinion are Hebra and Kohn. On the other hand, such observers as Bazin and Hardy state that they have seen such a fungus as Gruby described, and Fox, Hutchinson and Anderson consider it parasitic, and such statements cannot be set aside, as our authors would have them, on the absurd ground that these gentlemen have confounded ordinary ringworm of the scalp with cases of this affection. A single positive observation of theirs outweighs of course a thousand negative attempts of their opponents, and must be accepted as demonstrating that in certain and exceptional cases, not to be distinguished clinically from the majority, appearances in every way resembling ordinary alopecia *areata* are caused or accompanied by the growth of a peculiar fungus, and this plant is apparently the same in all the cases in which it has been seen by these various observers. To these I am able to add an unmistakable instance of the disease in which the parasitic element was unmistakably present, the only one in some twenty cases which have been under my observation, although they were not all carefully examined by the microscope, and some of them were so far advanced as to present but few hairs remaining for examination. It seems fairly demonstrated, then, that there is a parasitic affection of the scalp, which differs not at all in appearance and course from ordinary non-parasitic alopecia *areata*, just as a parasitic *sycosis* exists in spite of a similar argument against its existence from the Vienna school. The statement of Rindfleisch, recently made in the *Archiv für Dermatologie*, that the disease is caused by an anatomical change in the structure of the hair, seems to be set aside by the observation of the author, that he has seen the same appearances occurring quite as frequently in the hairs of persons not affected with this disease. Thus far no appearances peculiar to the non-parasitic form of this affection have been observed, nothing, in fact, to explain its nature, so that Kohn is obliged to fall back upon the theory of functional nervous derangement for a cause. To me this is by no means a satisfactory explanation of all its phenomena, as the other tissues and functions of the skin are in no way altered, and its gradual spread from a single central point in many cases over large surfaces remote from each other and supplied by distinct nerves, is opposed to such a theory. Its simultaneous occurrence in several members of the same family, and in persons of

* See this JOURNAL, vol. LXXV. p. 112.

robust health, too, does not lend it support. In the way of treatment nothing new is proposed.

Under symptomatic alopecia, among other casual affections which may give rise to defluvium capillorum, we find discussed at length that condition, the most frequent of all causes of premature baldness, alopecia furfuracea, or seborrhoea.*

To return to the hypertrophies. Hebra describes briefly under the general title *Keratosis*, such affections as callosities, corns, cutaneous horns, warts and ichthyosis; and Kohn follows with valuable chapters on hypertrophy of the nails, on scleroderma, on elephantiasis arabum, of the extremities, genitals, and the congenital form, elephantiasis teleangiectodes, and on framboesia, a name hitherto applied to all sorts of moist excrescences of various shapes upon the skin, both syphilitic and non-syphilitic forms, for the latter of which he suggests the name *papilloma*.

Under atrophies, in addition to the affections already mentioned, Kohn describes as *xeroderma* a rare and parchment-like condition of the skin, not to be confounded with the variety of ichthyosis to which the same name has been applied by Wilson; the multiform degeneration of the tissues of the skin called *senile atrophy*; and the *striae et maculae atrophicae*, once regarded as proof of pregnancy, even upon the skin of a virgin.

The impossibility of continuing the consideration of these very interesting and various affections in any proper manner within the limits of an article like the present, prevents anything beyond this simple enumeration of the contents of the remainder of the volume. Enough has been said to show that it treats of many of the most obscure forms of cutaneous disease, and in a manner with few exceptions worthy of the great fame of the author and the bright promise of his co-laborer.

CICATRICES OF THE MEMBRANA TYMPANI.

From Lectures delivered by PROFESSOR ADAM POLITZER.
Communicated by Dr. EDWARD MILLINGEN, Assistant to the Otolological Clinic, Vienna.

PATHOLOGICAL perforations in the membrana tympani show great diversity of behavior.

* The very great prevalence of this affection and the frequent deformity to which it gives rise, have led me to translate the chapter relating to it, with its valuable details of treatment, rather than to attempt an abstract of it in this article. It will appear in a future number of the JOURNAL.

VOL. VII.—No. 14a

Sometimes extensive destruction may be restored by the formation of cicatricial tissue, while in other cases the healing process of small perforations is totally arrested, their margins having been covered over by connective tissue. Cicatrization of perforations begins by the exudation of plastic elements on their margins, which are by degrees organized.

Experience shows how difficult it is to determine under what conditions perforations are likely to close. Artificial openings in the membrana tympani close almost invariably. The size of a perforation is not to be depended upon. The most extensive reorganization of the membrane that Politzer has yet noticed was in the case of a young man who suffered from a discharge in the right ear for five years. A year ago, the only visible remains of the membrane were seen near the short process of the malleus. The bare handle of the malleus stood free in the opening, and behind it the dark mucous membrane of the promontory. Behind and above the *processus brevis* was seen the articulation connecting the incus and stapes. The hearing was so greatly diminished that the patient could not hear the loud tick of a watch when in contact with the ear. A loud voice was heard at one foot. A few weeks ago, Politzer found the membrane restored, with the exception of a small oval opening below the end of the manubrium mallei.

The healing process of perforations begins by the exudation of greyish-yellow plasma on the margins of the opening. As this plasma is being organized into cicatricial tissue, the opening diminishes gradually in size until it is obliterated, generally leaving a thin cicatrix, which is sunken in and possesses a bright spot at its deepest part. Its borders are very sharply marked.

The structure of such cicatrices varies. They either consist of real fibrous tissue, or, as Politzer has noticed, of a membrane void of structure, but covered on both sides by pavement epithelium. The elastic fibres of the *substantia propria* of the membrana tympani are either altogether absent in the cicatricial tissue, or project here and there into its peripheral parts. Not seldom does one meet with new vessels winding into the outer layers of the tissue, and to all appearances of venous nature.

The functional disorder caused by cicatrices on the membrana tympani does not stand in any relation to the size of the cicatrix. It has been noticed that large cicatrices, occupying two-thirds of the membrane, have caused very little trouble to the

hearing, while smaller ones have been accompanied by severe deafness. This, of course, depends on the accompanying changes in the articulations of the ossicula, caused by the previous discharge.

Cases have, however, been noticed in which the cicatrix is the direct cause of deafness. This depends on the elasticity and consistency of the cicatricial tissue. A thin and relaxed cicatrix is more likely to interfere with the movements of the membrana tympani, or change the tension of the ossicula, in consequence of its incapability of resisting the pressure of the outer air.

Deafness is much more serious when a cicatrix is so far sunken in that it comes in contact with the promontory. The vibrations of the membranes are thus considerably hindered, although the cicatrix is not adherent to the promontory. This is clearly seen when the deafness brought on by such a complaint is greatly ameliorated by inflating air in the tympanum and thus pushing the cicatrix away. The deafness returns again as soon as the air in the tympanum has been absorbed, and the cicatrix resumed its former position. This may also be the case when the cicatrix is deeply sunken in without touching the promontory. If, in such cases, it has been confirmed by means of the catheter that no catarrhal thickening or secretion is present, the relapse of deafness may be attributed to the cicatrix itself.

In a previous work, Politzer reported a number of cases in which rupture of thin cicatrices followed the use of the catheter, and his method. In most of these and similar ones observed by Pagenstecher, Schwartz and Schurig, astonishing and permanent amelioration was the immediate result, although the treatment previous to the rupture was followed by very short benefit. Politzer assumes that such durable amelioration is caused by a change effected in the texture of the cicatrix. A slight degree of inflammation having been brought on by the rupture, the tissue is endowed with greater power of resistance. Hence the abnormal tension of the membrana tympani and ossicula is diminished, and the transmitting apparatus performs its functions with more regularity.

Guided by such experience, Politzer determined to bring on a slight inflammation in cicatrices, by making incisions into the tissue, restricting himself only to cases in which the repeated relapse of deafness was caused by the relaxed state of the cicatricial tissue.

An incision should be made in the deep-

est part of the cicatrix. An ordinary paracentesis needle is very well suited for the purpose. Air should be inflated into the tympanum after the operation, in order to convince the operator of his success. When the cicatrix has been pierced, the air should stream out into the meatus.

This operation has never been followed by inflammation or suppuration. The borders of the wound generally close on the next or third day after the operation, and the cicatrix is less sunken in. Inflation should not be practised before the third day, and then a very weak stream should be used. This may be done best by blowing in with the mouth instead of the air bag. It was also noticed that sometimes one operation is not sufficient to secure permanent benefit. It is then necessary to repeat the operation on different points of the cicatrix, at intervals of two and three days.

In recommending this operation, Politzer remarks that the excision of a portion of the cicatrix is attended with danger of suppuration.

Taking into consideration the fact that improvement in hearing following repeated incisions into cicatrices can only be attributed to the consequent retraction and thickening of the tissue, it may be assumed that the same change may be brought on in the relaxed tissue of membrana tympani. This operation for long standing obstruction of the Eustachian tube has been followed by very good results, especially in cases in which the membrana tympani were relaxed, thin and sunken inwards.

A CASE OF MENINGEAL RHEUMATISM, SIMULATING CEREBRO-SPINAL MENINGITIS.

Read before the Boston Society for Medical Observation, by J. G. BLAKE, M.D., Boston.
Notes by Mr. L. S. DIXON, House Officer, City Hospital.

THE patient, a strong, healthy boy of 19, was employed in storing lumber in a steam-heated drying-room, from which he would often go home or into a cooler place while in a profuse perspiration. Oct. 26th, he was attacked with headache and pains all over the body; these continued to increase until the 29th, when he was obliged to go to bed, with chills and severe pain in head, back and limbs. On the 31st, he entered the Boston City Hospital. He was very weak, with intense headache over the whole head, severe pain in back and great tenderness along the whole length of the spine, preventing entirely his lying on his back.

The head was thrown fully back and held stiffly, forming with the spine a well-marked curve. Some pain also in abdomen, with tenderness and gurgling in right iliac fossa; no diarrhoea, no rose spots, no epistaxis. Hearing somewhat lessened. The patient was very forgetful, unable to remember the question asked long enough to answer it, but answered rationally if roused and urged. Groaned continually, and complained of head with nearly every breath. Pulse 84, very irregular, but full. Respiration 32. Temperature 102. Skin warm and moist; lips dry and cracked; teeth covered with sordes; tongue slightly coated in centre; very little appetite; considerable thirst. He was ordered—

R. Liq. ammon. acet.,

Spts. æth. nit., ʒss. M.

to be taken every two hours. Also—

R. Potassii bromidi, gr. xx. p. r. n.

The next day the condition was about the same, but in addition to the cephalalgia he complained of great pain in the left knee, which was red and considerably swollen; he also experienced double vision, and objects appeared side by side and nearly two inches apart. His condition remained unchanged for the next few days.

Nov. 6th.—The patient had improved some, though the headache was still severe and exposure to the light was very unpleasant. He still lay in a curved position, though the neck was more movable. One eye was constantly closed on account of diplopia. The knee was less painful. Appetite very good. Temperature remaining at about 101°. On the 8th, he could lie on the back and move the head easily. On the 13th, patient was quite comfortable, complaining only of stiffness and some pain in knee. Tongue clean. Headache and diplopia gone. Temperature 99°. On the 15th, severe headache, with partial return of diplopia. Knee almost free from pain and swelling. From this time he continued to improve slowly, until the 23d, when, at his own request, he was discharged, feeling very weak and stiff, but free from pain.

CONTINUOUS DILATATION IN STRICTURE.—Sir Henry Thompson is not an advocate for continuous dilatation in simple stricture, believing that better and safer results are obtained by withdrawing the catheter or bougie immediately after it has entered the bladder (as Luxmoore recommended) than by leaving it in the urethra from a few minutes to half an hour, as practised by some surgeons.—*Dublin Quarterly Journal*.

Medical and Surgical Journal.

BOSTON: THURSDAY, APRIL 6, 1871.

In justice to the contributors who have so abundantly supplied us with matter for this week, we yield to them the usual Editorial space, and also send out four additional pages.

THE SECOND ANNUAL REPORT OF THE STATE BOARD OF HEALTH OF MASSACHUSETTS.

MESSES. EDITORS,—I offer you a partial analysis of the document mentioned in the caption, there being no room for criticism either in your pages or in the character of the pamphlet. We are surprised at the amount and value of the work accomplished by the Board of Health during the past year. The Report consists of 433 closely printed pages octavo, and is illustrated with instructive maps. It begins with the "General Report of the Board." This first gives us a statement of the—

"*Legislative Results of last Year's Labors.*"—Among the most agreeable results of the labors of the Board last year was the passage, by the legislature, of an act of incorporation to enable certain persons to build an abattoir at Brighton. The same act imposed upon the Board very important duties in reference to the building itself and to the establishment of sanitary rules upon which it was to be subsequently managed. We hailed this act as one destined to bring great benefit to the comfort, health, and, we may add, to the wealth of Brighton. We regret to say that, as yet, no practical result has come from the act, owing, as we have good reason for believing, to the persistent opposition of the butchers of that town. The Board desires to bring the subject again earnestly before the legislature and whole community, as well as before the citizens of Brighton.

"We are informed that indictments are now pending against three or four slaughter-houses in Brighton as nuisances to the immediate neighborhood.

"We may also remark that the building of an abattoir, with its thorough sanitary rules, is quite as important to the community at large, consumers of the meat slaughtered at Brighton, as to the inhabitants of that town. The Commissioners on Cattle have already ordered that no cattle shall be carried from Brighton. Many affected

with the 'foot and mouth disease' are liable to be slaughtered at private establishments in different parts of the State and the meat then sent to the consumers, and eaten. This cannot be prevented until proper inspection before the killing of the animals can be enforced, as is now done in all the regularly constituted abattoirs of Europe.

"In order to aid still further a true appreciation of the importance of this subject, we recommend the perusal of two reports presented this year, viz.: upon 'Health of Towns,' and upon 'Typhoid Fever in Massachusetts.' In these reports, besides an immense mass of evidence going to prove the deleterious results arising from the decomposition of animal refuse, some of our correspondents allude especially to the bad effects caused by proximity to slaughter-houses."

Next comes a notice of the Foot and Mouth Disease in Cattle—Its Effects on Man. Under the head of "Overcrowding of Tenement Houses and Want of Clean Streets in Boston," is given a letter addressed by the State Board of Health "To the Board of Aldermen, Health Commissioners of the City of Boston," upon the subject in question. The Report says:—

"A reference to the report by the Secretary upon the health of the city of Boston will show the influence of this letter. It seems to have been small indeed."

We will add—what does not appear in the Report—that the Secretary, Dr. Derby, was also one of the "Consulting Physicians" of Boston. In that capacity he with his associates labored to impress upon the City Government the necessity of enforcing the law against nuisances in the shape of filthy streets and houses. All in vain! Accordingly Dr. Derby, Dr. J. C. White and Dr. P. P. Ingalls resigned their offices as Consulting Physicians; and your Editorial commendation of their course has been quoted by the London *Medical Times and Gazette*, with further words of approval, under the head of "A Spirited Resignation." "Smallpox in Massachusetts" introduces the neglect of vaccination in Holyoke, in consequence of which there were 167 cases in that town, and 36 deaths from that loathsome disease.

"The special investigations made under direction of the Board during the present year" deal with the subjects of Poisoning by Lead; Trichiniasis in Massachusetts; Health of Towns; Charbon or Malignant Vesicle in Massachusetts, with a highly

valuable *résumé* of the latest views on contagion, and on disinfection with carbolic acid, by Arthur H. Nichols, M.D., of Boston; Typhoid Fever in Massachusetts; Homes for the People; Alcoholic Drinks—with information derived from correspondence throughout the world; Mortality of the City of Boston; Ventilation of School-houses; Mystic Pond Water; Air and some of its Impurities; Health of Minors employed in the Manufacture of Cotton, Woolen, Silk, Flax and Jute; Sewing Machines.

This preliminary chapter concludes with a statement of the—

"*Expenses of the Board.*—It will be seen by the following statement of accounts that our Board has expended \$2,288.85, which is less than half of the sum which the legislature appropriated for our use in 1870.

"We trust that the same liberality and the same generous confidence in the intentions of the Board will be continued in 1871. It is always necessary to have some reserved fund for extra work which may suddenly occur.

"The Secretary has already in behalf of the Board asked for an appropriation equal to the sum granted last year. If this be allowed, we shall promptly enter upon new tasks and with renewed zeal; in full confidence that all money expended by us will in the end be amply repaid to the State."

A note of admiration (!) is all that we would append to this little balancing of accounts.

After a brief special report by the Secretary, come the papers treating of the various topics above rehearsed. To reproduce all that is valuable in them would be to reprint them entire. A few of them, however, challenge notice as of necessity.

The paper on the "Examination of the Water of Mystic Pond," &c., has already proved of the utmost practical moment to the custodians of that source of supply to water-takers. It has shown that the pollutions (by tanneries, &c.) which now enter the Mystic water are subjected to something like homeopathic dilution and trituration—or, as the chemists say, to "dilution and oxidation." These two influences, we are told, are sufficient *at present* in the case of Mystic water to render it, as received at Charlestown, Somerville and East Boston, unquestionably good and wholesome, though not quite equal to the Cochituate. A large *increase* of the present pollutions, however, says the examiner (Mr. William R. Nichols, of the Institute of Technology), would afford reason to appre-

hend danger to the water-takers. The paper is accompanied with a map, showing the region drained by Mystic Pond.

Homes for the People.—This subject is presented by the Chairman of the Board, Dr. H. I. Bowditch, in several sections, each of which is a distinct statement, and may be read without reference to its companions.

Dr. B. describes—

"*First.*—A night-stroll with a London police inspector, compared with a similar one taken afterwards in Boston.

"*Second.*—Operations of philanthropy, solely or chiefly as shown in the Peabody Buildings and Miss Burdett Coutts's Market, Reading-room and Home at Columbia Square.

"*Third.*—The operations of the 'improved Industrial Dwelling Company'; or, philanthropy and capital united, with success to both.

"*Fourth.*—The Jarrow Building Company, by which a tenant becomes a proprietor of the home he lives in.

"*Fifth.*—Organized work among the poor, inaugurated by Miss Octavia Hill, assisted by Mr. Ruskin and others.

"*Sixth.*—A comparison between a model lodging-house, and a low tenement-house in Boston.

"*Seventh.*—Convalescent homes."

The "night stroll with an Inspector of the London Police" was taken on the evening of July 20, 1870, when Dr. Bowditch started with a friend on a walk through the purlieus of Whitechapel and of Ratcliffe Highway, two of the most noted thoroughfares of vice, crime and poverty in London. The narrator gives a graphic account of the persons he saw and *felt* in this labyrinth, but forgets to give us a picture of any particular den; merely saying, in a general manner, that the private houses into which his guide led the way were "wretched and filthy enough to drive away any one not wholly lost to decency and cleanliness." The hiatus, however, is easily supplied by recollecting the descriptions of Dickens.

Subsequently, that is, at 8½, P.M., of Dec. 1st, 1870, Dr. Bowditch and Dr. Derby (Secretary of the Board) met by previous appointment at the Hanover Street police station, Boston.

"Our guide not having arrived, we sat a half hour, and during that time, a well-dressed but drunken woman was brought in reeling, and she was forthwith transferred to the cells below. Soon afterwards, a man, who said he was about 50 years old—a 'worker along shore,' and who got his meals 'here and there on the street once in a

while,' and who 'had no home,' claimed a lodging. He was kindly received, but I saw none of the paraphernalia of Dickens's Casual Ward, and no food is usually given.

"The station, in every respect, is superior to that at L— Street, London, both for the police and the prisoners. This was probably owing, in some measure, to the fact that the Boston station was built for the purpose, whereas that in London is an old building, aristocratic looking, it is true, with its sweeping and ornamented staircases, and its large rooms. But they are not adapted to the purposes intended, even in that portion occupied by the police; and in others where the prisoners were kept they were rather crowded. The Boston station, however, I do not think, in some respects at least, entirely proper for human beings, however degraded, to be compelled to stay in even for a short time. The cells are in the cellar. They seem clean. The outside of them are scrupulously nice. The comforts for passing the night are very small. Four persons can be shut in one room. Four *bunks* are arranged in some, and these are made of strips of thin iron about an inch wide. At the head these strips are sloped, apparently to serve as a pillow. No mattress or even straw to lie upon, or covering of any kind were visible. The whole cellar, at the time of our visit, was heated intensely by means of steam, or hot-water pipes. 'We have no blankets,' said our guide, 'so we have to keep the room warm.' * * * * *

"Soon afterwards we started on our walk, and almost immediately entered Stone's yard, where about a year ago a murder was committed. Our guide, lighting a bit of tallow candle which he carried with him, led us up a broken and dirty staircase, which, for its filth and dilapidated condition, was quite equal to anything I saw in London. In the chamber of murder we found a mass of extreme wretchedness. A young man was crouching beside a hot hard-coal iron-pot stove, while another, a red-eyed, sinister and dogged-looking youth, was seated, apparently for want of any better place, on the foot of a nasty bed. One old woman was gleaming with her skinny fingers bits of coal from a mass of half-burned ashes and cinders, while another stealthily looked at us from a corner where she sat upon the floor. I felt quite secure with our guide, but I should have shrunk from being there alone at night. 'How came you here?' asked our guide of the red-eyed individual above alluded to. 'I came to visit that man,' was the only and curt

reply. 'And who is he to whom you spoke?' I asked, after leaving the filthy spot, and getting into the open air. 'He is a thief, and has no other business. He is not a bold operator. He steals little things, here and there. He loves to rob drunken men when they are asleep upon the sidewalk or door-steps, and sometimes he makes a fine business of it. One of the prisoners you saw this evening was found drunk, and with over two hundred dollars in his pocket.' The passage-way leading to this court, and the court itself, are simply infamous with their stinks. That sharp Saxon word alone expresses the thought I wish to convey. The privies were filled to overflowing, and covered with nastiness to the extent of two or three feet from the seats, when I visited and inspected them six months ago, and from what our noses and our eyes, with the aid of our dim light, could perceive, there has been no improvement in the interval. * * * * Many of the lodging-places are simply horrible. To know this, stoop with us, and crawl cat-like down this dark cellar-way, and see a *home* in Boston! This cellar room is scarcely high enough for us to stand erect. One can easily almost touch each of the four sides while standing in the centre of it. The floor is dark, dirty and broken; apparently wet, also, possibly from the tide oozing up. Two women are there, commonly, yet rather tawdriy dressed, and doing nothing, but apparently waiting, spider-like, for some unlucky, erring insect to be caught in their dusty yet strong meshes. Tubs, tables, bed-clothes and china ware, are huddled incongruously together. Our guide strikes a match by the stove, and then opens a door into a so-called bed-room. It is a *box*, just large enough to hold a double bed. No window is in it, no means of ventilation, save through the common room up the cellar steps. The bed is of straw, covered only by a dirty blanket. Everywhere is the picture of loathsome filth. The stench, too, of the premises is horrible, owing to long accumulated dirt, and from the belching up of effluvia from solutions of dark mud, reeking with sewage water from the city drains and water-closets. It is difficult for us to breathe in the tainted atmosphere. We feel ourselves enveloped in a physical atmosphere most horrible, and a moral one most degraded. We glance into another 'bed-room!' opening by another door into this common room. It is a fac-simile of its neighbor. Upon the dirty blanket lie recently washed and finely starched wrist-cuffs, and the jaunty modern

hat and feather now worn by all. The strange contrast between fashionable neatness and exterior properties of appearance with supreme nastiness was never more strongly manifested. 'How much do you pay for these rooms?' we asked, as we turned to leave. 'Four dollars a week!'

"Take care of your heads," said our guide, as we again, in single file, crept up the cellar stairs, and tried to breathe again freely in the open street, after stooping low to avoid the blow we should inevitably have received if we had walked erect. 'Yet,' quietly remarked our guide, 'in just such places, strangers, men of respectability from the country, go and lose their money and their watches, and then come stealthily to us begging us to regain their property without bringing shame on themselves.' What a revelation! I saw no worse home in Whitechapel. I even doubt whether any so bad can exist under English law. And this was not a solitary example. We visited several of the same type. If any faith can be put in the idea of an overruling, retribution-paying Justice; if any confidence can be placed in all the deductions of modern sanitary science, Boston will sometime suffer the heaviest of penalties for its great guilt in these matters. Nay, is it not even now suffering the direst of calamities in the deleterious influences exerted on every child born within such dens? * * * * One might as well hope to train up a California pine in the darkness of a cellar, while bruising each hour some tender shoot as it is struggling towards the light and air of heaven, as to raise a child to perfect physical health, real learning and virtue in such a spot. And yet such spots are numerous in Boston. Proud is our city and justly so of her churches, her religious freedom and her public schools. But of what use are her churches, her freedom and her schools to those of her children whom she allows to grow up in such places as these I have attempted to describe. All these advantages are a mockery even and a snare; for while we piously exclaim, 'See how good and learned we can make our citizens,' at the same moment we are allowing such evil influences to exist broadcast amongst us. I am not such an optimist as to believe that we can root out all vice by building houses, but I do contend that if for no other purpose, for the physical good of the persons themselves, and for the safety of the public health, nuisances like this vile abode I have attempted to describe should be summarily dealt with by the law, and that bet-

ter houses should be everywhere erected for the people, even the most vicious and degraded."

On hearing of such places as those just described, some exclaim that they should be razed to the ground—that a fire that sweeps away such rookeries is to be welcomed! But stop! Would you drive the inmates to sleep on the wharves or on dust heaps—to freeze, perhaps, in lodgings *al fresco*? You must first provide tenements more worthy of human habitation, and then the sooner those dens of abomination are swept with the besom of destruction the better. It is precisely here that the English municipal law and English philanthropy step in. It is here that aristocratic London is found to be far in advance of any city in this our land, which we boast to be the poor man's paradise. London has provided places of refuge (which are not also places of confinement) for the poorest and vilest! When we have done likewise, then we may take our position, perhaps, in the advance, and do what she has done—ordain that our rookeries shall be abolished, as we condemn unseaworthy ships.

Let us re-join Dr. Bowditch in his night inspection of the purlieus of London:—

"We entered and examined one of the public lodging-houses, where the poor, vicious or criminal congregate at night, and which, for the past few years, have been under the strict surveillance of the police. Any man has a right to open one of these houses, but he must do so in strict conformity to law, and be constantly inspected by the police. We saw one house capable of receiving three hundred males. We stumbled up the clean, but uneven and rather circuitous staircase, and entered a large room nearly filled with single and narrow cots. Many of them were occupied with stalwart men. In the dim light of a low gas-jet their half-naked forms looked Herculean, as the men either slept unconscious of our presence, or hastily drew up the covering which the warmth of the night had induced them to throw off. Every such public house is obliged to be kept clean, and to provide at least three hundred cubic feet of air for each lodger. Usually there are passages for ventilation permanently opened in the walls. Plenty of water and numerous wash-basins are found below. Immense kitchens, with their perpetually burning fire in the grate, afford to each lodger the means of cooking his meal. In one of these houses, occupied by known thieves, nothing easily portable is seen. Even the brass stoppers of the wash-basins have dis-

appeared—a bit of cork, having no real value, alone remains. No knives or forks are to be found; they have been stolen, and no new ones have since been bought. In such lodging houses, whether in the 'thieves' quarter' or elsewhere, 3d. per night is the price for lodging, or 18d. per week.

"One or more lodging houses we visited in which both sexes are admitted. Theoretically, only married persons are admitted, and each couple has one pen, so to speak, allotted to them for 6d. per night. That is, a large room is divided into compartments just big enough to hold a double bed, and to allow a small space in which to move around. Each partition wall is about eight feet high, but not reaching to the ceiling, which gives in a general way some circulation of air. One cannot be sure that such places may not be used at times as assignation houses. But there is little danger of this difficulty becoming too common, for over these, too, the police have despotic control; and a house would be closed that became infamous for prostitution when intended simply as a healthful lodging house. Long after midnight our walk continued. About a quarter to 1, A.M., our guide rang the bell of the 'Casual Ward' of the district. Similar places, under the same name, are now to be found almost everywhere in England, and usually in connection with the union poor-houses.

"Wherever in England a houseless wanderer appears at night, there will these evidences of Dickens's generous heart and all-powerful pen be found ready to receive him. They have their origin in the fact that he, in the very locality where we were then standing, had, during one of his midnight strolls with the police, seen many persons lying one cold night on the doorsteps of the Union Workhouse—they had been refused admission even there, 'because of want of room.' Dickens's feelings were enlisted, and he used most efficiently his voice and his pen, until, by law, every man, woman and child in England who needs shelter can claim, at least for one night, lodging, a supper, a warm bath and a breakfast next morning, and perhaps some articles of new clothing are given if those used before entrance be ruined or contain any 'contagion' that will be injurious to the public health. In payment, a certain amount of labor is performed if required.

"The porter soon responded to our summons. We examined everything about the establishment. It was of that exquisite neatness and cleanliness so peculiar to Eng-

land. The bath-tub was as white as the driven snow; the beds were compact and clean; the floors without a trace of dirt. In the reception room we saw the signature made by Dickens at his last visit to the spot, only a few months before his death.

"In conclusion, I will express my admiration for the way in which English law, and its official, who accompanied us under that law, deal with the public lodging-house system of the poor, and with the poor and vicious themselves of London. The rooms and walls of some of the buildings used as common lodging-houses in Whitechapel, are as clean, if not so fine, as those of many a palace, or humbler English home. At present, the law does not feel at liberty to be so despotic in regard to the English working-man's private home. If he choose to have filth in his own premises the law does not usually prevent it. It is his castle, and therefore sacred to private right—a most noble maxim indeed, unless it be carried too far. I believe the time will come in England, and in Massachusetts also, and it will come with the consent of the whole people, when the community will feel that an impure moral or physical private abode is a nuisance and crime against humanity, as much in quality if not in degree, as the filthy, ill-ventilated public lodging-house, and as such it will be abated, if need be, by law.

"Again, this thorough police inspection of public lodging-houses of the poor is the commencement of a great sanitary reform. It is complementary to the many private enterprises for improving the houses of the people, as now carried on by private charity, or by enlightened capitalists."

We must pass over Dr. Bowditch's statements of the results of his thorough investigation relative to some of the means now in operation in England for improving the homes of the people, though we wish that his whole series of papers in the Report might be re-printed and distributed to every tax-payer in Boston. We quote, however, the following from his summary:—

"*Second.* I have briefly described the Peabody and Burdett Coutts Buildings. I have given them as illustrations of philanthropy, and of its effects upon the dwellings of the laborers, and their results upon the health and morals of the people.

"*Third.* I have shown in my notice of the operations of the 'Improved Industrial Dwelling Company,' how philanthropy and capital can join hands and each reap an

ample return for its efforts made and for means given.*

"*Fourth.* I have indicated the workings of the Jarrold Building Company, in which the tenant, besides gaining all the advantages afforded by the preceding methods, is stimulated to become himself the proprietor of his own home.

"*Fifth.* I have described the extraordinary and yet simple labors of Miss Hill, aided by the well-known writer on art, Mr. Ruskin, Rev. Stopford Brook, &c. By these labors the vilest dens of London have been reformed to neatness and morality, by the personal influence of the individuals engaged in the matter, while at the same time the relations of landlord and tenant have been rigidly enforced, all money-giving charity has been virtually abolished, and with all this there has been an ample return for capital invested."

Two facts are made apparent by Dr. Bowditch's revelations:—

First.—There are in Boston dwellings which are physical and moral nuisances: they are nuisances in the material sense as foci where disease is produced, and whence contagion spreads: they are moral nuisances, because no system of public school instruction can make good citizens out of the children growing up in those places.

Second.—These nuisances can and should be abated. Of course, the children of the vicious are not under any circumstances likely to grow up virtuous. But, the families of the unoffending poor may be rescued from surroundings subversive of self-respect, and may also be in a measure isolated from contamination.

"CONVALESCENT HOMES"—are for poor persons not sick enough to be retained in hospitals, but too feeble to work. England, says Dr. Bowditch, has reached the "really fine practical result which declares that every community of any size, and each hospital in large metropolitan districts, must have a convalescent home."

It is suggested that a combination of our hospital and dispensary forces could easily work out such a provision among us.

SEWAGE. WHAT SHALL WE DO WITH IT? THE EARTH CLOSET. IRRIGATION OF LAND. DRAINAGE TO THE RIVERS OR SEA.—This is the title of the eighth and concluding paper.

This matter is of importance to us in Boston, in view of the future, when the whole of the Back Bay shall have been filled in and built upon. An extension of the present system of drainage, it is said, will be

* The Italics are ours.

fully adequate to at all times relieve that district of its sewage matter. But, may it not eventually make Charles River—*smell badly*? Now here, again, Dr. Bowditch's English experience helps us to a solution of this problem.

"A few years ago, the Thames became so offensive to the nostrils of all the citizens who came near it, that with one accord the believers in the actual noxiousness of these exhalations from it, polluted as it was by thousands of water-closets, and all others who did not like to have any unpleasant smell come betwixt 'the wind and their nobility' even if it be not unhealthy, united for the cleansing of the Thames. Accordingly, the city of London, under the 'engineering skill' of Mr. Bazolette, made two immense sewers, one on each side of the Thames, from the metropolis down to short distances below the two villages of Barking on one side and Crossness on the other. At these two spots, by means of huge openings closed by an elaborate system of gates, the flood of water from all London, after being dammed up for some hours, is twice daily at high tide let out into the Thames."

The experiment was successful, and the Londoners no longer held their noses because of the Thames. But, if the sewage emanations be pernicious to the inhabitants of the metropolis, why should they not be injurious to the simple villagers of Barking and Crossness? So thought Dr. Bowditch. And so had previously thought Dr. Parsons, of Barking. Well, Dr. Parsons set about with great zeal to prove this grievance by statistics. But his figures "wouldn't add up" so as to produce the desired result. Seventeen per thousand (17 per 1000) living is the death-rate of Barking! Dr. Parsons is a truthful man, and said so.

He was, says Dr. Bowditch, "surprised at this result. He remembered, moreover, that he had not been especially called to persons residing near the outlets, and there was no greater amount or peculiar character of disease prevailing there than at other spots in his circle of practice. Dr. Parsons drove me to the outlet. Our course for nearly half a mile was directly upon the top of the drain. Every few yards I saw gratings of iron, which I learned were the ventilators of the sewer, but I observed no special odor arising from them as I had expected. We were driving simply over a smooth greensward. Arrived at the mouth, I placed myself directly over the partially running stream. It was low tide, and I could see the whole of the opening. I stood over the ventilator just above the gates,

and where I knew that there was a large quantity of sewage water. I was still more surprised at the absence of odor in all these places. The keeper of the gates has a house and rears a family above, and between them and the outlet into the Thames. He assured me that he never observed any peculiar odor, and that his family enjoyed good health.

"The inferences I was obliged to make were: 1st, That by some means unknown to me the excreta had become deodorized during the water carriage; and 2d, That at present there was no proof that this deodorized sewage water of London does actual harm to those dwelling near it." And so Bostonians may take courage, and if, through the increase of the present system of drainage, the River Charles should become a source of offensive odors to their nostrils, they will have the resource of a *cloaca maxima* like those of London.*

As we pour much more water into our drains than the sewers of the English metropolis receive, the effluvia is presumed to be more easily deodorized in the former than in the latter; while at the same time the sewage matter, in proportion as it is diluted, is rendered less fit for manuring purposes. We, therefore, need not follow Dr. Bowditch over the fields he saw fertilized with London sewage, though we may mention that he there saw carrots four and a half inches in diameter at the top, and a

* We cannot help remarking here that if Mr. George Seelling's plan could be carried out, all necessity for this great sewerage outlay would be precluded. That plan, as we understand it, is to enlarge the present "fall basin" on the west side of the mill-dam so as to occupy with tide water the whole area of the "Back Bay" not now built upon. This, surrounded by a broad avenue, would give an elegant street for residences and a superb drive and promenade, which, with Commonwealth Avenue connected with the opposite shore by a handsome bridge, would make Boston a more beautiful city than it can ever become in any other way. But the main point is this—the proposed arrangement would provide the town with an unequalled breathing apparatus. Would that it could be brought about!

In this connection I beg you, Messrs. Editors, to reprint the remarks of "S." in a recent number of the JOURNAL, on the "Climate of the United States." They are as follows:—

"If all this is admitted, the question comes home to us with grave significance. But a few years since, two or three hundred acres of water, renewed from the ocean twice in twenty-four hours, lay to the west of Boston, and in immediate proximity to the general breathing place of its inhabitants. Indeed, there was no portion of the city too remote to be reached by its salutary influence. The Commonwealth, however, claiming a vendible interest in the territory below low-water mark, has displaced a large portion of this water, and thus has, in fact, been filling its treasury at the cost of the health of one-seventh of its population. Is it not time to claim, in the interest of the masses of the people, whose condition in life forbids them to seek the healthful summer resorts, a reservation, if not an extension, of the yet unfilled water space, and thus a limited compensation be tendered for the mischief so inconsiderately done?"

foot long; also potatoes eight or nine inches long, and weighing, some of them, two pounds.

MORTALITY OF THE CITY OF BOSTON.—This paper is the condensed result manifestly of a great deal of labor. It contains long, elaborate and instructive tables, and is accompanied with a map of Boston, tinted to show the portions consisting of "made land." The map is marked off in twenty-four *Health Districts*, which are numbered from twenty to twenty-four to avoid all chance of their being confounded with wards. These health districts are arranged so as to be comparatively homogeneous as regards hygienic influences. The statistics are worthy of careful study. But we must limit ourselves to a few extracts.

"By tracing along the columns one may see how destructive each disease was in each district, and what proportion of a thousand died from it among the infants, among the young children, and among the adults. Thus, for instance, in the very populous northern half of South Boston (No. 30), we see that among 1,007 infants 4.9 in 1,000 died from scarlet fever, while in the region east of the Providence Railroad crossing, in what was lately Roxbury (No. 42), among 301 infants the deaths from the same cause were at the rate of 26.4 in 1,000.

Croup and diphtheria are in the same way discovered to have been more prevalent in districts 38 and 39, while three districts have had no deaths from this cause."

The report had previously stated that district No. 38 is the southern half of South Boston, including Washington Village, and (together with No. 39) the low, marshy region on the borders of the South Bay, referred to in the "Report on Flats and Water Areas," presented to the last Legislature; and that district No. 39 is ward thirteen. Like the preceding district, a large portion is so low as to make drainage difficult if not impossible. It is being occupied, however, by tenement and other houses, in violation of the law relating to "wet and spongy lands."

"Cholera infantum is seen to have killed very nearly 68 in a thousand of all the nursing children in the city, and this in such enormously disproportionate numbers in the various districts as may surprise those who do not already know the influence which overcrowding and filth have upon this disease.

"Pneumonia, a disease of all ages, but especially fatal at the extremes of life, shows a greater uniformity in its distribution through the districts than any other of the list."

"Looking now at the general death-rates for all ages we see a very great disparity in the several districts, ranging from 5.7 (district 28), 9.1 (district 41), and 9.8 (district 32), up to the enormous rate of 37.9 in a thousand in district 42. This latter region is low, imperfectly drained, in parts densely peopled and full of nuisances which have been allowed to grow and fester unchecked by the city authorities. Stony Brook between Tremont Street and the Providence Railroad, and also in the neighborhood of Parker Street, has been a source of disease to all the dwellers in its vicinity. The stench from this neighborhood has been often perceptible during the past summer at the distance of a mile. District 42 is also in

the immediate neighborhood and under the influence of the sunken tract about Ruggles Street, in district 37, on which water has been standing continually during the past hot summer. Fortunately the tract in question is hardly peopled as yet, although covered with new houses which must be raised, like Church and Suffolk Streets, at a vast expense, most of which might have been saved if the health authorities of the city had done their duty. District 21 is next most fatal to life. It is very densely peopled and contains the worst tenement houses in Boston. District 29, with its crowded and narrow streets leading from Harrison Avenue to the South Bay, comes next in order; 38, 24, 23, 30, 39 and 22 follow not far behind in their ratios of death to population.

"The death-rates of East Boston and the North End present a contrast which is worthy of examination. These districts are of nearly equal population and the number at all ages very nearly correspond, yet the mortality in one is half as great again as in the other. One is crowded, in great part deprived of sunlight, and full of nuisances; the other has abundance of light and air. Can a stronger argument be offered in favor of providing breathing spaces for the people than is presented by the figures in the first two horizontal lines of our second table, from one end to the other?"

The Second Annual Report of the State Board of Health is a credit to its authors and to the Commonwealth. L. F.

A "RHODE ISLAND M.D." sends us the following quotation from the *Providence Journal* of March 25, 1871, and asks the questions which are appended:—

"Read what the Massachusetts State Assayer* says in regard to the composition of old Dr. Warren's Root and Herb or Quaker Bitters:—

"20 STATE STREET, BOSTON.

"J. A. BRODHEAD, Esq., State Commiss., Mass.

"Sir.—A sample of 'Old Dr. Warren's Root and Herb or Quaker Bitters,' from Flint & Co., Providence, R. I., has been analyzed with the following results:—This is not a beverage nor an intoxicating liquor, but is an official medicinal preparation containing extracts of Roots and Herbs.

"It is free from injurious substances, and may be used as directed by persons requiring a medicine of this kind. Very respectfully

"S. DANA HAYES, §

"State Assayer and Chemist."

"GALVANIZED IRON" WATER PIPES. SECOND REPORT TO THE MIDDLESEX EAST DISTRICT MEDICAL SOCIETY, FEB., 1871.—Your Committee begs to make the following additional report on the question referred to him, and reported on at the meeting of the Society held two months ago.

* Is the above the legitimate business of the "Massachusetts State Assayer?"

† "Old Dr. Warren" is to be understood to be John C. Warren, of Massachusetts.

‡ The word "official" is intended to deceive the un-

informed into the belief that it is official.
§ Is S. D. Hayes a member of the Suffolk District and Massachusetts Medical Societies?

Further inquiry made of skilled analytical chemists (and answered by reference to the records of more than one hundred analyses* of waters drawn through galvanized iron), of experts in materia medica and toxicology, manufacturers of zinc (galvanized) iron, house painters, and of our State Board of Health, as well as farther examination of books of authority, all go to confirm your Committee's first report.

One correction should be made in that report, viz.: where it reads "in every case where zinc has been found in water from 'galvanized' pipe, it has been in the form of the carbonate," it should be amended so as to read "in the great majority of cases." For in certain exceptional cases there is also found an uncombined oxide of zinc suspended in the water, and making it distinctly turbid, so that no one would drink it. But as no proof exists that either carbonate or oxide is poisonous, this correction in no way affects the conclusions reached or the opinion expressed in the first report, viz.: that no safer available material for water-pipes than "galvanized iron" is known to us.

He would be over-confident who should declare that nothing can ever be adduced to show that the material in question can be dangerous as a service pipe for drinking-water, but we are not in possession of any information that justifies the confident assertions, which have been made of late, that water is poisoned by passing through "galvanized iron." Certain reported cases of such poisoning, even when accompanied by notes of *post-mortem* examinations, fail to support the theory or to justify the alarm, for, to a physician's eye, they furnish no proof that zinc had anything to do with the symptoms or the *post-mortem* appearances.

(Signed) F. WINSON.

BOSTON DISPENSARY.—The following are the statistics of this institution for the six months ending March 31st. The number of new patients at the Central Office is 7768, of which 5222 were medical cases and 2546 surgical. The number of new patients in the Districts during the same time is 4726, with the following results:—

| | |
|--|------|
| Discharged, cured or relieved, | 4817 |
| Sent to hospitals, or removed from Dist. | 262 |
| Died, | 134 |
| Under treatment, | 121 |

| | |
|--|------|
| Under treatment at last annual report, | 4834 |
| | 108 |

| | |
|------------------------------------|------|
| | 4726 |
| Number of cases at Central Office, | 7768 |

| | |
|--|--------|
| Total No. of cases at Central Office and in Districts, | 12,494 |
|--|--------|

| | |
|---------------------------------------|---------|
| No. of recipes during the six months, | 25,303 |
| No. of recipes since July, 1856, | 628,631 |
| No. of patients since July, 1856, | 295,822 |

SAMUEL A. GREEN, Supt.

* Mr. S. D. Hayes has records of more than one hundred analyses.

† Dr. Cassells (Professor of Chemistry in Cleveland Medical College) reports finding water "strongly impregnated with chloride of zinc," in addition to the carbonate. This is an exceptional result, and needs explanation.

WOUNDS OF THE STOMACH. RECOVERY.—In the *Bulletin of Medical Sciences* of Bologna, for November, 1870, Dr. Alphonso Borbieri, Surgeon to the *Ospedale Maggiore* of Bologna, reports two cases of wounds, one of the diaphragm and stomach, the other of the stomach only. The first patient was a young man, 22 years of age, and of delicate constitution. The wound penetrated between the ninth and tenth ribs of the left side, in the median line, descending through the cavity and perforating the diaphragm and stomach. The second patient was a man of 60 years of age, and of robust constitution. In his case, the wound penetrated below the left costal arch, directly into the stomach. In the first case, the hemorrhage was internal, a large amount of blood being vomited. In the second, the hemorrhage was from the external wound, and more profuse than in the first. The wounds of the skin were each about an inch and a half in length, and were in both cases closed with adhesive plaster, and the abdomen covered with cloths wet with cold water. In both cases about four ounces of blood were taken by venesection on the third day in consequence of the degree of inflammation. On the fourth day convalescence commenced, and it progressed without accident in both cases, the first being discharged, cured, on the seventeenth day, and the second, likewise, on the twentieth day.—*Med. Record.*

ON THE OXIDATION OF BRUCIA. By SCHENK, of Stettin.—Brucia is still sometimes employed as a test for nitric and nitrous acids. The red color passing into yellow, produced by a solution of brucia in concentrated sulphuric acid with nitric or nitrous acid, is not the result of the formation of a nitro compound, but the result of oxidation, and may likewise be obtained by chlorine water, peroxide of hydrogen, very dilute chlorate of potassa, very dilute chromic acid or chromate of potassa, dilute hypochlorate of soda, ferricyanide of potassium, bichloride of platinum, &c. If a drop of cupric chloride is added upon a few drops of solution of brucia, a rose-color is produced near the yellow margin resulting from the influence of the sulphuric acid.

The reaction is observed with auric and ferric chlorides only by not exceeding certain definite proportions. That the color is in reality a product of oxidation is more evident by the decoloration produced by protochloride of tin with some muriatic acid.—*Ph. Cent. Halle*, 1870, 283, 284, from *Fresenius Zeitschr. f. anal. Chem.*

THE MUSCLES OF THE HUMAN JAW exert a force of 534 pounds. The quantity of pure water which blood contains in its natural state is very great; amounts to almost seven-eighths. Kiel estimates the surface of the lungs at 150 square feet, and the blood is a fifth the weight of the body. A man is taller in the morning than at night to the extent of half an inch or more, owing to the relaxation of the cartilages. There is iron enough in the blood of forty-two men to make a plowshare of twenty-four pounds or thereabouts. The human brain is the twenty-eighth part of the body, but in the horse the brain is not more than the four-hundredth.—*National Med. Journal.*

Medical Miscellany.

ACCORDING to the *Wiener Medicinische Wochenschrift*, the Professorial Faculty nominated unanimously Dr. Ducek, the former Professor at the Joseph's Academy, as successor to Skoda. There is no doubt that the nomination will be ratified by the government. Prof. Oppolzer had demanded as Senior Professor, the wards of Skoda, while Ducek will take charge of the wards to be vacated by Oppolzer, which at the same time are to be enlarged.

It is announced from London that Chang, one of the Siamese twins, was paralyzed on the right side, on his return to America last August. At present he has so far recovered that he is able to move about with the assistance of a crutch. During his illness, his brother suffered in no way, though naturally he was compelled to remain in bed during the period of Chang's sickness.

GASTRITIS CAUSED BY OVERDOSE OF TINCTURE VERATRUM VIRIDE.—At a stated meeting of the New York Pathological Society, Dr. Fennell presented a portion of the stomach removed from a lady 60 years of age. The mucous membrane was highly injected, showing the effects of intense gastritis. The lady was attended by a homoeopathist residing in 34th street. She was suffering from hepatic distress, with occasional vomiting of bilious matter. For this derangement he prescribed ten drops of Norwood's tincture of veratrum viride once every three hours. The woman, though vomiting terribly after each dose, continued until six doses in all were taken. Shortly after taking the sixth dose she sank and died from exhaustion. This is what he termed homoeopathic treatment. The death was undoubtedly caused by the large doses of veratrum viride, inducing fatal acute gastritis.—*Med. and Surg. Reporter.*

ONE THAT SPEAKETH BY AUTHORITY.—The Washington *Evening Star* last week contained the following remarkable paragraph:—

Bone Felon.—The London *Lancet* recommends the following as the best remedy yet discovered for this most excruciating disease:—"As soon as the disease is felt, put directly over the spot a fly blister about the size of your thumb nail, and let it remain for six hours, at the expiration of which time, directly under the surface of the blister, may be seen the felon, which can instantly be taken out with the point of a needle or a lancet.

Will the *Star* be good enough to specify the number of the *Lancet* containing this new discovery in the pathology of paronychia?—*Med. Gaz.*

SUNSTROKE.—The *Fremdenblatt* contains a correspondence from a traveller who, on March 23, 1866, was near the Dead Sea with a party of eighteen, one of whom fell from his horse, overcome by the excessive heat of 42° R. (106.5° F.) One of the Bedouin guides bathed his hands, head and face with lemon juice, after which the sufferer was able to ride two hours, to the banks of the Jordan, where he could rest for several hours, and

then completely recovered.—*Med. and Surgical Reporter.*

WE understand that the Managers of the Edinburgh Infirmary have appointed a committee to consider if beds can be allocated to Dr. Thomas Keith, for the purpose of performing the operation of ovariectomy, with which his name is associated. For many years past, Dr. Keith has kept up an hospital at his own expense, and has performed the operation in question for the 101st time, with remarkable success.—*Med. Press and Circular.*

M. NOBEL has discovered and applied a method for rendering nitro-glycerine in explosive during storage or transportation. It consists simply in mixing the nitro-glycerine with a certain amount of alcohol; as long as the alcohol is not evaporated, the nitro-glycerine is said to be in explosive.—*American Chemist.*

PAMPHLETS RECEIVED.—The Boston Gynecological Society and its Work during 1870. The Annual Address for 1871. By Winslow Lewis, M.D., President of the Society. Reprinted from the Journal of the Gynecological Society of Boston. Boston: James Campbell. Pp. 25.

DIED.—At Somerville, March 26th, Albert A. Porter, M.D., of Wrentham, 30 yrs. 8 months.—At Dover, N. H., March 27th, Dr. Daniel A. Wendell, a graduate of Bowdoin Medical College and a surgeon in the Army during the war.

The death of Dr. J. T. Cole, in last week's JOURNAL, reported as having taken place March 3d, occurred Jan. 3d, and had already been recorded in the JOURNAL.

Deaths in sixteen Cities and Towns of Massachusetts for the week ending April 1, 1871.

| Cities and Towns. | No. of Deaths. | Frequent Diseases. |
|-----------------------|----------------|-----------------------------------|
| Boston | 125 | Consumption 72 |
| Charlestown | 16 | Pneumonia 32 |
| Worcester | 27 | Croup and Diphtheria 13 |
| Lowell | 17 | Scarlet fever 12 |
| Chelsea | 4 | Typhoid fever 8 |
| Cambridge | 27 | |
| Salem | 9 | |
| Lawrence | 13 | |
| Springfield | 4 | |
| Lynn | 11 | |
| Pitchburg | 1 | |
| Newburyport | 3 | |
| Somerville | 5 | |
| Fall River | 7 | |
| Haverhill | 3 | |
| Holyoke | 5 | |

278

Lowell reports three deaths from smallpox.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, March 18th, 125. Males, 65; females, 60. Accident, 2—apoplexy, 1—asthma, 1—inflammation of the bowels, 2—disease of the bowels, 1—disease of the bladder, 1—bronchitis, 5—Inflammation of the brain, 1—disease of the brain, 4—cyanosis, 1—consumption, 32—convulsions, 3—croup, 5—debility, 4—dropsy, 2—dropsy of the brain, 3—erysipelas, 2—scarlet fever, 4—typhoid fever, 2—gastritis, 1—disease of the heart, 5—cerebral hemorrhage, 1—intemperance, 2—congestion of the lungs, 5—inflammation of the lungs, 10—marasmus, 6—old age, 6—pleurisy, 1—premature birth, 2—scrofula, 1—disease of the spine, 1—diarrhoea, 1—unknown, 6.

Under 5 years of age, 46—between 5 and 20 years, 8—between 20 and 40 years, 33—between 40 and 60 years, 16—above 60 years, 22. Born in the United States, 60—Ireland, 27—other places, 9.